

Western Massachusetts Electric Company
Docket No. DTE 05-25

Information Request DTE-01
Dated: 04/08/2005
Q- DTE1-001
Page 1 of 3

Witness: Michael T. Smith
Request from: Department of Telecommunications and Energy

Question:

Please identify the number of districts within the Company, the district names, and the names of the communities' served by each district.

Response:

See attached spreadsheet containing the Company, District, Community Served Breakdown.

Western Massachusetts Electric Company
Docket No. DTE 05-25

Information Request DTE-01
Dated: 04/08/2005
Q- DTE1-002
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Witness: Michael T. Smith
Request from: Department of Telecommunications and Energy

Question:

Please identify the number of bulk power stations within each district. Provide the bulk power station names associated with each district.

Response:

The attached spreadsheet contains all substations located within each district. Both bulk and distribution stations are provided.

Witness: Michael T. Smith
Request from: Department of Telecommunications and Energy

Question:

Please provide a table, in an electronic EXCEL spreadsheet (formulas included), that identifies for each main distribution feeder emanating from each bulk power station the SAIDI values for each of the prior four years (2001, 2002, 2003, and 2004), and by two consecutive reporting years. Calculate the system SAIDI by year, and by two consecutive reporting years. For each district (identified in response to DTE 1-1), calculate the annual SAIDI average for each of the prior four years. For each bulk power station (identified in response to DTE 1-2), calculate the annual SAIDI average for each of the prior four years. Utilize the following format.

Description	2001	2002	2003	2004	-----Two Years----- 01-02 02-03 03-04
System					
District Annual Average					
Bulk Power Station Annual Average					
District Annual Average					
Bulk Power Station Annual Average					
Statistics by individual feeders					
Circuit ID, location					

Response:

See attached spreadsheet showing the Company, District, Substation, and Feeder level SAIDI reliability information over the last four years.

The following methodology was used to provide the reliability information requested. An ACCESS database was used to link database tables containing the outage information from WMECO's outage management system (OMS). Based on creating individual queries described below to derive the most accurate response, the repetitive, accumulative calculations are embedded in the process. The results were then exported to EXCEL for filing, which is the reason no formulas are present within the EXCEL spreadsheets provided. However, the basic calculation of SAIDI = customer minutes interrupted divided by average customers served was used for each event.

Circuit SAIDI was determined by calculating the circuit SAIDI contribution at the event level at the date/time of each event and summing the SAIDI component for each event to get the total circuit SAIDI. In calculating the SAIDI component, the number of customers served is based on the number of customers on the circuit at the time of the event. Calculating SAIDI in this manner best deals with changing circuit customer counts associated with circuit reconfigurations.

Witness: Michael T. Smith
Request from: Department of Telecommunications and Energy

Question:

Please provide a table, in an electronic EXCEL spreadsheet (formulas included) that identifies for each community the Company serves the SAIDI values for each of the prior four years (2001, 2002, 2003, and 2004) and by two consecutive reporting years. For each community identify the assumptions used to identify the SAIDI values. Utilize the following format.

Description	2001	2002	2003	2004	-----Two Years----- 01-02 02-03 03-04
System					
Community name					

Response:

The following spreadsheet provides an estimated SAIDI value for each community that WMECO serves.

The Company OMS tracks outages at the circuit level and the device that was involved in the outage (ie Recloser, Fuse, transformer etc). The method used to calculate a community SAIDI value uses the location (town) of the device to determine the community affected. Many devices serve more than one community, but the system does not separate out the customers affected by community for the event. For these instances, the community where the device is located gets all of the customer minutes for those events.

The following methodology was used to provide the reliability information requested. An ACCESS database was used to link database tables containing the outage information from WMECO's outage management system (OMS). Based on creating individual queries described below to derive the most accurate response, the repetitive, accumulative calculations are embedded in the process. The results were then exported to EXCEL for filing, which is the reason no formulas are present within the EXCEL spreadsheets provided. However, the basic calculation of $SAIDI = \text{customer minutes interrupted} / \text{average customers served}$ was used for each event.

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Docket No. DTE 05-25

Information Request DTE-01
Dated: 04/08/2005
Q- DTE1-005
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Witness: Michael T. Smith
Request from: Department of Telecommunications and Energy

Question:

Given the information provided in response to DTE 1-3, provide a table, in an electronic EXCEL spreadsheet (formulas included), that ranks the 2003-2004 statistic to identify the highest (worst) ten percent of the utility's feeders.

Response:

The following spreadsheet provides a table of the highest (worst) ten percent of the utilities circuits when using the 2003-2004 combined SAIDI values provided in response Q-DTE1-003.

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Information Request DTE-01
Dated: 04/08/2005
Q- DTE1-006
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Witness: Michael T. Smith
Request from: Department of Telecommunications and Energy

Question:

Given the information provided in response to DTE 1-3, provide a table, in an electronic EXCEL spreadsheet (formulas included), that identifies all feeders that are more than 300 percent greater than the system average of all feeders in the 2003-2004 period.

Response:

The following spreadsheet provides a table of all feeders where the feeder SAIDI is more than 300% of the average SAIDI for all of the circuits in the 2003-2004 period.

Witness: Michael T. Smith
Request from: Department of Telecommunications and Energy

Question:

Please provide a table, in an electronic EXCEL spreadsheet (formulas included), that identifies for each main distribution feeder emanating from each bulk power station the SAIFI values for each of the prior four years (2001, 2002, 2003, and 2004), and by two consecutive reporting years. Calculate the system SAIFI by year, and by two consecutive reporting years. For each district (identified in response to DTE 1-1), calculate the annual SAIFI average for each of the prior four years. For each bulk power station (identified in response to DTE 1-2), calculate the annual SAIFI average for each of the prior four years. Utilize the format specified in Information Response DTE 1-3.

Response:

The following spreadsheet provides a table of SAIFI values for each feeder, substation, district, and overall system for each of the prior four years, and by two consecutive reporting years.

The following methodology was used to provide the reliability information requested. An ACCESS database was used to link database tables containing the outage information from WMECO's outage management system (OMS). Based on creating individual queries described below to derive the most accurate response, the repetitive, accumulative calculations are embedded in the process. The results were then exported to EXCEL for filing, which is the reason no formulas are present within the EXCEL spreadsheets provided. However, the basic calculation of $SAIFI = \text{number of customers interrupted} / \text{average number of customers served}$ was used for each event.

Circuit SAIFI was determined by calculating the circuit SAIFI contribution at the event level at the date/time of each event and summing the SAIFI component for each event to get the total circuit SAIFI. In calculating the SAIFI component, the number of customers served is based on the number of customers on the circuit at the time of the event. Calculating SAIFI in this manner best deals with changing circuit customer counts associated with circuit reconfigurations.

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Information Request DTE-01
Dated: 04/08/2005
Q- DTE1-008
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Witness: Michael T. Smith
Request from: Department of Telecommunications and Energy

Question:

Please provide a table, in an electronic EXCEL spreadsheet (formulas included) that identifies for each community the Company serves the SAIFI values for each of the prior four years (2001, 2002, 2003, and 2004) and by two consecutive reporting years. Utilize the format specified in Information request DTE 1-4.

Response:

The following spreadsheet provides a table that identifies the SAIFI value for each community for each of the prior four years and by two consecutive reporting years.

The methodology used to calculate a community SAIFI value uses the location (town) of the device to determine the community affected. Many devices serve more than one community, but the system does not separate out the customers affected by community for the event. For these instances, the community where the device is located gets all of the customer minutes for those events.

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Information Request DTE-01
Dated: 04/08/2005
Q- DTE1-009
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Witness: Michael T. Smith
Request from: Department of Telecommunications and Energy

Question:

Given the information provided in response to DTE 1-7, provide a table, in an electronic EXCEL spreadsheet (formulas included), that ranks the 2003-2004 statistic to identify the highest (worst) ten percent of the utility's feeders.

Response:

The following spreadsheet provides, in table format, the top 10% highest (worse) performing SAIFI circuits for the 2003-2004 combined reporting years.

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Information Request DTE-01
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Q- DTE1-010
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Witness: Michael T. Smith
Request from: Department of Telecommunications and Energy

Question:

Given the information provided in response to DTE 1-7, provide a table, in an electronic EXCEL spreadsheet (formulas included), that identifies all feeders that are more than 300 percent greater than the system average of all feeders in the 2003-2004 period.

Response:

The following spreadsheet provides in table format, the feeders that are more than 300 percent greater than the system average SAIFI for all feeders in the 2003-2004 reporting period. The table that has been provided for in response to Q-DTE1-007 was used.

Witness: Michael T. Smith
Request from: Department of Telecommunications and Energy

Question:

Please provide a table, in an electronic EXCEL spreadsheet (formulas included), that identifies for each main distribution feeder emanating from each bulk power station the CAIDI values for each of the prior four years (2001, 2002, 2003, and 2004), and by two consecutive reporting years. Calculate the system CAIDI by year, and by two consecutive reporting years. For each district (identified in response to DTE 1-3), calculate the annual CAIDI average for each of the prior four years. For each bulk power station (identified in response to DTE 1-4), calculate the annual CAIDI average for each of the prior four years. Utilize the format specified in Information Response DTE 1-3.

Response:

The following spreadsheet provides the circuits, substation, district, Company CAIDI information for the prior four reporting years and by two consecutive reporting years.

The following methodology was used to provide the reliability information requested. An ACCESS database was used to link database tables containing the outage information from WMECO's outage management system (OMS). Based on creating individual queries described below to derive the most accurate response, the repetitive, accumulative calculations are embedded in the process. The results were then exported to EXCEL for filing, which is the reason no formulas are present within the EXCEL spreadsheets provided. However, the basic calculation of $CAIDI = \text{customer minutes interrupted} / \text{number of customers served}$ was used for each event.

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Dated: 04/08/2005
Q- DTE1-012
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Witness: Michael T. Smith
Request from: Department of Telecommunications and Energy

Question:

Please provide a table, in an electronic EXCEL spreadsheet (formulas included), that identifies for each main distribution feeder emanating from each bulk power station the MAIFI values for each of the prior four years (2001, 2002, 2003, and 2004), and by two consecutive reporting years. Calculate the system MAIFI by year, and by two consecutive reporting years. For each district (identified in response to DTE 1-3), calculate the annual MAIFI average for each of the prior four years. For each bulk power station (identified in response to DTE 1-4), calculate the annual MAIFI average for each of the prior four years. Utilize the format specified in Information Response DTE 1-3.

Response:

WMECO is unable to measure MAIFI with the currently deployed technology.

**Witness: Michael T. Smith
Request from: Department of Telecommunications and Energy**

Question:

Please provide a table, in an electronic EXCEL spreadsheet (formulas included) that both identifies and summarizes for each of the prior four years (2001, 2002, 2003 and 2004) by system, by district, by bulk power station, by feeder the annual capital investment approved as well as capital investment completed in the Company's transmission and distribution infrastructure. Utilize the following format.

Year: 200x		
Description	Capital Investment Approved	Capital Investment Completed

System

District Annual Average
Bulk Power Station Annual Average

District Annual Average
Bulk Power Station Annual Average

Statistics by individual feeders
Circuit ID, location

Response:

Please see the attached spreadsheets that identify and summarize for the years 2001-2004 by system, district, bulk power station, and by feeder the annual capital investments approved and capital investments completed in the Company's transmission and distribution infrastructure.

The detailed back-up of 1000 pages (bulk*) is being provided to the Department on CD-ROM.

* Bulk material provided.

Witness: Michael T. Smith
Request from: Department of Telecommunications and Energy

Question:

Please provide a table, in an electronic EXCEL spreadsheet (formulas included) that identifies for each community the Company serves for each of the prior four years (2001, 2002, 2003, and 2004) the annual capital investment approved and capital investment completed in the Company's transmission and distribution infrastructure. Utilize the following format.

Year: 200x	Capital Investment	Capital Investment
Description	Approved	Completed
System		
Community name		

Response:

Please see the attachments provided in response to Q-DTE1-013 for the spreadsheets identifying each community the Company served for the years 2001-2004, the annual capital investments approved and capital investments completed in the Company's transmission and distribution infrastructure.

Detailed back-up of 1000 pages (bulk*) material has been provided to the Department on CD-ROM in response to Q-DTE1-013.

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Dated: 04/08/2005
Q- DTE1-015
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Witness: Donald M. Bishop
Request from: Department of Telecommunications and Energy

Question:

In the Company's DTE 99-84 Service Compliance Plan (2002-2004) Compliance Filing dated December 10, 2001, the Company states on page 4, Section I. C.

The historical average and standard deviation for benchmarking will be based on the ten most recent years worth of data for WMECO. This will be a fixed average for the duration of the PBR. Where ten years worth of information is not available to WMECO, WMECO will use the maximum number of years of data available, so long as three years are available. As WMECO collects additional data, that data will be included in benchmarking until ten years worth of data is collected.

For SAIDI and SAIFI ...

Therefore, please include 2001, 2002 and 2003 data in the derivation of Telephone Answering Factor and provide the following revised pages:

1. Form B, page 1;
2. Section III. B.1.; and
3. Section V.

Response:

See the attached updated Form B, Section III. B.1., and Section V. for the revised Telephone Answering Factor information as requested.